CLAIMS

What is claimed is:

1. An electrode for an iontophoretic drug delivery system, the electrode comprising:

a platform;

a retainer including a malleable characteristic and being operably connected to the platform;

a conductor being operably connected to the platform, the conductor further being electrically coupled within the iontophoretic drug delivery system;

a dose controller being operably coupled to the conductor; and,

a drug delivery matrix being operably connected to the platform and proximate the conductor,

wherein the conductor, the drug delivery matrix, and the dose controller cooperate to deliver a drug to a user when the electrode is affixed to the user and operably connected within the iontophoretic drug delivery system.

2. The electrode of Claim 1 wherein the dose controller being housed within the iontophoretic drug delivery system and capable of monitoring and adjusting electrical current flowing within the conductor.

3. The electrode of Claim 1 wherein the conductor comprises a plurality of discrete segments, each of the plurality of segments being proximate the drug delivery matrix.

4. The electrode of Claim 3, wherein the dose controller being housed within the iontophoretic drug delivery system and capable of monitoring and adjusting electrical current flowing within the plurality of continuous segments of the conductor.

5. The electrode of Claim 4, wherein the dose controller is electrically coupled to at least one of the plurality of segments of the conductor.

6. The electrode of Claim 1, wherein the dose controller is housed within the iontophoretic drug delivery system and capable of monitoring and adjusting electrical current of at least one of the plurality of discrete segments of the conductor.

7. The electrode of Claim 6 wherein the conductor comprises a plurality of discrete segments, each of the plurality of discrete segments being proximate the drug delivery matrix.

8. The electrode of Claim 7, wherein the dose controller being electrically coupled to at least one of the plurality of discrete segments of the conductor.

9. The electrode of Claim 1 further comprising:

a connector operably attached to the platform, the connector further being electrically coupled to the conductor.

10. The electrode of Claim 1, further comprising:

an adhesive operably associated with the platform wherein the adhesive facilitates releasable securement of the electrode to the user.

11. The electrode of Claim 1, wherein the dose controller is a resistor.

12. The electrode of Claim 1, wherein the dose controller is a feedback circuit.

13. The electrode of Claim 1, where the retainer is selected from the group of materials having structural memory.

14. The electrode of Claim 1, wherein the conductor comprising:

an active conductor being electrically coupled within the iontophoretic drug delivery system; and,

a dispersive conductor being electrically coupled within the iontophoretic drug delivery system, wherein at least one of the pair of conductors including a malleable characteristic.

15. The electrode of Claim 14 wherein the active or dispersive conductor comprises a plurality of discrete segments, each of the plurality of discrete segments being proximate one of the plurality of drug delivery areas.

16. The electrode of Claim 15, wherein the dose controller being housed within the iontophoretic drug delivery system and capable of monitoring and adjusting electrical current flowing within the active or dispersive conductor.

17. The electrode of Claim 16, wherein the dose controller being electrically coupled to at least one of the plurality of discrete segments and capable of monitoring and adjusting electrical current flowing within the active or dispersive conductor.

18. An electrode for an iontophoretic drug delivery system, the electrode comprising:

a platform;

a conductor including a malleable characteristic and being operably connected to the platform; and,

a drug delivery matrix being operably connected to the platform and proximate the conductor,

wherein the conductor and the drug delivery matrix cooperate to deliver a drug to a user when the electrode is affixed to the user and operably connected within the iontophoretic drug delivery system.

19. The electrode of Claim 18 further comprising:

a dose controller being operably coupled to the active conductor.

20. The electrode of Claim 19 wherein the dose controller comprises a resistor.

21. The electrode of Claim 19 wherein the dose controller is housed within the iontophoretic drug delivery system and is capable of monitoring and adjusting electrical current flowing within the active conductor.

22. The electrode of Claim 18 wherein the conductor comprises a plurality of continuous segments, each of the plurality of continuous segments positioned proximate the drug delivery matrix.

23. The electrode of Claim 22, wherein the dose controller is housed within the iontophoretic drug delivery system and is capable of monitoring and adjusting electrical current flowing within the plurality of continuous segments of the conductor.

24. The electrode of Claim 23, wherein the dose controller is electrically coupled to at least one of the plurality of continuous segments of the conductor.

25. The electrode of Claim 18 wherein the conductor comprises a plurality of discrete segments, each of the plurality of discrete segments positioned proximate the drug delivery matrix.

26. The electrode of Claim 25, wherein the dose controller is housed within the iontophoretic drug delivery system and is capable of monitoring and adjusting electrical current flowing within the plurality of discrete segments of the active conductor.

27. The electrode of Claim 25, wherein the dose controller is electrically coupled to at least one of the plurality of discrete segments of the active conductor.

28. The electrode of Claim 18 further comprising:

a connector being operably attached to the platform, the connector further being electrically coupled to the conductor.

29. For an iontophoretic drug delivery system capable of delivering a medicament to a bodily area having a tissue resistance, the system including a dose controller and an electrode, the electrode comprising a malleable retainer, a conductor, and a drug delivery matrix capable of containing the medicament wherein the conductor is operably coupled to the dose controller and operably connected within the drug delivery matrix, a method comprising the steps of:

selecting an electrical characteristic for the dose controller in response to the corresponding tissue resistance of the bodily area;

placing the electrode proximate the bodily area;

aligning the drug delivery matrix proximate the bodily area; and,

conforming the malleable retainer to the bodily area,

wherein the medicament is administered to the bodily area in response to activation of the iontophoretic drug delivery system and the electrochemical cooperation between the conductor, dose controller, and the drug delivery matrix

30. The method of Claim 29 wherein the dose controller is a resistor.

31. The method of Claim 30 wherein the resistor is fixed.

32. The method of Claim 30 wherein the resistor is variable.

33. The method of Claim 29 wherein the dose controller comprises a sensor and a monitor.

34. The method of Claim 29 further comprising:
setting an amount of electrical current supplied to the conductor; and,
sensing the electrical current in the conductor.

35. The method of Claim 34 further comprising:
adjusting the amount of electrical current supplied to the conductor in response to tissue resistance of the area.

36. The method of Claim 29 wherein the conductor is integral with the malleable retainer.

37. In electrode for an iontophoretic drug delivery system, the electrode comprising:
a platform;
a conductor being operably connected to the platform, the conductor further being electrically coupled within the iontophoretic drug delivery system;
a dose controller being operably coupled to the conductor; and,
a drug delivery matrix being operably connected to the platform and proximate the conductor,
wherein the conductor, the drug delivery matrix, and the dose controller cooperate to deliver a drug to a user when the electrode is affixed to the user and operably connected within the iontophoretic drug delivery system.

38. The electrode of Claim 37 wherein the dose controller being housed within the iontophoretic drug delivery system and capable of monitoring and adjusting electrical current flowing within the conductor.

39. The electrode of Claim 37 wherein the conductor comprises a plurality of discrete segments, each of the plurality of segments being proximate the drug delivery matrix.

40. The electrode of Claim 39, wherein the dose controller being housed within the iontophoretic drug delivery system and capable of monitoring and adjusting electrical current flowing within the plurality of continuous segments of the conductor.

41. The electrode of Claim 40, wherein the dose controller is electrically coupled to at least one of the plurality of segments of the conductor.

42. The electrode of Claim 37, wherein the dose controller is housed within the iontophoretic drug delivery system and capable of monitoring and adjusting electrical current of at least one of the plurality of discrete segments of the conductor.

43. The electrode of Claim 42 wherein the conductor comprises a plurality of discrete segments, each of the plurality of discrete segments being proximate the drug delivery matrix.

44. The electrode of Claim 43, wherein the dose controller being electrically coupled to at least one of the plurality of discrete segments of the conductor.

45. The electrode of Claim 37 further comprising:

a connector operably attached to the platform, the connector further being electrically coupled to the conductor.

46. The electrode of Claim 37, further comprising:

an adhesive operably associated with the platform wherein the adhesive facilitates releasable securement of the electrode to the user.

47. The electrode of Claim 37, wherein the dose controller is a resistor.

48. The electrode of Claim 47, wherein the dose controller is a feedback circuit.